



# RCA Amateur Radio Club

## Indianapolis, IN

[www.w9rca.org](http://www.w9rca.org)



FEBRUARY 2022

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, FEBRUARY 8<sup>th</sup>, 6:30 PM AT NORTH SIDE EVENTS, IN THE GAME ROOM, FORMERLY THE KNIGHTS OF COLUMBUS, 2100 EAST 71<sup>st</sup>, INDIANAPOLIS, IN

### RCA ARC NEWS

**JANUARY MEETING SUMMARY** – Thanks to all who attended the January meeting. New batteries for the UPSs at the repeater site have been purchased. John, KF9UH, will install them. No information on the Indy Hamfest has been reported. Hopefully by the next meeting we'll know something. Jim, K9RU, reported that the Club's 6m beacon is still operational (50.069 MHz). Jim also reported that our spare circulator, for the repeater, has been loaned to the 146.70 group in hopes of solving an interference problem (not an interference associated with our repeater). January VHF contest is this upcoming weekend. A new version of WSJT-X has been released with an update to benefit VHF contest operators. The problems of trying to get replacement parts to repair HF linear amplifiers and sell them was discussed. Also discussed was the increasing use of using remotely controlled ham stations.

### AMATEUR RADIO LICENSE TEST SESSION

**Date:** Saturday, February 12, 2022  
**Time:** Starting at 12:00 pm **by appointment only.**  
**Location:** Salvation Army EDS Training Facility, 4020 Georgetown Rd  
Indianapolis, IN 46254-2407  
**Required: FRN and completed form NCVEC 605.**  
**Contact:** Jim Rinehart, k9ru@arrl.net, 317 721-1458

### HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Feb 12	Hendricks Co. Amateur Radio Society, 8 am to 1 pm, Hendricks Co. Fairgrounds, 1900 E Main St, Danville, IN
Feb 12-13	CQWW WPX RTTY <a href="https://www.cqwpwrtty.com/rules.htm">https://www.cqwpwrtty.com/rules.htm</a>
Feb 14-18	ARRL School Club Roundup <a href="http://www.arrl.org/school-club-roundup">http://www.arrl.org/school-club-roundup</a>
Feb 19-20	ARRL DX SSB Contest <a href="http://www.arrl.org/arrl-dx">http://www.arrl.org/arrl-dx</a>
Feb 25-27	CQ 160M SSB Contest <a href="https://cq160.com/">https://cq160.com/</a>
Feb 26	LaPorte County Amateur Radio Club Cabin Fever Hamfest, LaPorte Civic Auditorium, 1001 Ridge St., LaPorte, IN
Feb 26	Dugger ARC Hamfest, Dugger Community Building, 834 S Hicum St, Dugger, IN
Mar 12	Wabash Valley ARA Bunny Fest, Clay County 4-H Fairgrounds, 6550 North State Road 59, Brazil, IN <a href="https://www.w9uuu.org/hamfest.php">https://www.w9uuu.org/hamfest.php</a>

An expanded, downloadable version of QST's [Contest Corral](#) is available as a PDF. Check the sponsors' website for information on operating time restrictions and other instructions.

## GROWING NUMBER OF OPERATORS COMPLETING WORKED ALL STATES ON 222 MHZ

Until very recently, it had been some 35 years since the most recent Worked All States (WAS) was awarded on 1.25 meters. Former ARRL President Joel Harrison, W5ZN, in Arkansas; Marshall Williams, K5QE, in Texas, and John Swiniarski, K1OR, in New Hampshire stand at the vanguard of a new generation of VHF enthusiasts aiming at earning the Worked All States (WAS) Award on 222 MHz (1.25 meters). Harrison was issued WAS #11 on 1.25 meters on December 27, 2021, while Williams was issued WAS #12 on January 11, 2022, and Swiniarski was issued WAS #13 on January 12.

"Since the 1980s, a combination of the old guard and a new group have been pursuing this quest," ARRL Radiosport Manager Bart Jahnke, W9JJ, said. Harrison worked Tom Worthington, NH6Y, in Hawaii, for his 50th state, while Williams followed close behind, working James Colson, K7KQA, operating EME portable from Oregon, for his 50th state.

Jahnke said the honor of being the very first 1.25-meter WAS recipient went to Terry Van Benschoten, W0VB, in 1983, earning what was then "220 MHz WAS." [Nine others joined the ranks](#) between then and 1987.

"In recent years, several stations have been working hard toward joining the ranks of WAS holders on this ITU Region 2-only band," Jahnke said. Other stations that have recently worked 50 states and waiting on the last confirmations include K1WHS and WA4NJP. N9HF and N0AKC are nipping at their heels. No activity on 1.25 meters was available in some of the last few needed states, and portable operations by KA6U, KB7Q, K7KQA, and N7GP made contacts possible.

"Congratulations to [the recent award recipients], and to all those VHF+ state chasers -- and to the many activators of rare 222 MHz states -- on their achievements in this continuing quest for 222 MHz Worked All States," Jahnke said.

In 1988, when the FCC reallocated the lower portion (220 - 222 MHz) of the 1.25-meter band to the federal government and Land Mobile Service, amateur activity on the band stalled, while adjustments were made to equipment and band plans. During the past several years, so-called "weak-signal" activity, especially EME, has increased on the band with a renewed interest from existing and new band users.

Amateurs interested in staying abreast of 222 MHz activity can follow the fun on the [222 MHz Activity Reflector](#).

Harrison, Charlie Betz, N0AKC, and Al Ward, W5LUA, have written an article, "The Quest for 222 MHz WAS," which contains tables, maps, and details on the propagation, locations, and equipment that made their operations possible. Ward was among the initial 10 WAS recipients for 1.25 meters. Plans call for the paper to be presented and published by the Central States VHF Society Conference in La Crosse, Wisconsin, July 29 - 30 and at other conferences. Harrison said, the paper also has "lots of history in it about the 1.25-meter band, the original 10, and the group now in the hunt along with ongoing 'roving' efforts of KB7Q and KA6U."

## CHINA IS EXPANDING ITS SOUTH CHINA SEA ANTENNA FARMS

A December 17 [commentary](#) from the Center for Strategic and International Studies ([CSIS](#)) has concluded that over the past year China has taken "major steps" to upgrade its capability to wage electronic warfare near the South China Sea." CSIS cites satellite images of massive antenna complexes to back its claim. Some facilities have already been suspected of jamming the communication facilities of US military aircraft operating in the region.



"The Chinese military is taking major steps toward improving its electronic warfare, communications, and intelligence-gathering capabilities near the South China Sea," said the commentary by Matthew P. Funaiolo, Joseph S. Bermudez Jr., and Brian Hart, all associated with CSIS. "Recent satellite imagery reveals that China has rapidly expanded facilities near Mumian, on Hainan Island, providing the People's Liberation Army (PLA) with greater ability to track and counter foreign military forces operating in the region and in outer space."

The commentary said, "Many assets in the vicinity appear dedicated to gathering communications intelligence, a subset of [signals intelligence] that includes the collection of communications between individuals and organizations."

Some of China's land claims in the South China Sea include rare DXCC entities. Scarborough Reef (Panatag Shoal) is one. Conflicting land claims exist for other islands, especially in the Spratlys. Further complicating the situation is a 2016 ruling from the Permanent Court of Arbitration in the Hague that discounted China's claims with respect to Scarborough Reef and the Spratlys. The Court ruled in favor of the Philippines in a dispute with China over Scarborough Reef.

In April 2015, a Chinese naval vessel "harassed a Philippine Air Force patrol flight in the Spratlys," according to one news account, by firing an illumination round. The incident postponed a Philippine Navy flight that was to evacuate an ailing participant of the DX0P Spratly Islands DXpedition. A private aircraft carrying a BBC reporter received radio warnings from the Chinese Navy to stay away from the South China Sea reefs and islands that China claims, strongly suggesting that China has expanded its sphere of influence to include the entire region.

This and the more recent artificial island-building in the South China Sea cloud the possibility of future DXpedition to rare DXCC entities in the South China Sea, whether or not China has laid specific claim. The Spratlys are claimed in whole or in part by China, the Philippines, Vietnam, and other countries, and the Philippines government had issued the DX0P call sign. An international amateur radio team postponed a December 2017 DXpedition to the Spratly Islands operating under Malaysian call sign 9M0W, although the DXpedition did take place the following year. The planned 2012 DX0DX DXpedition to the Spratlys was canceled altogether without explanation after being pushed back at least twice. The last operation from Scarborough Reef was in 2007. --CSIS

## ARRL FOUNDATION GRANTS FIRST-YEAR FUNDING FOR ARISS \*STAR\* KEITH PUGH INITIATIVE

A \$47,533 [ARRL Foundation](#) grant will fund the initial phase of the Amateur Radio on the International Space Station ([ARISS&€ USA](#)) \*STAR\* Keith Pugh Memoriam Project. \*STAR\*, which stands for Space Telerobotics using Amateur Radio, honors the memory of Keith Pugh, W5IU, a highly respected member of the ARISS team who died in 2019. ARISS arranges live question-and-answer sessions via ham radio between International Space Station (ISS) crew members and students. A long-time and enthusiastic supporter of ARISS, Pugh was a star ARISS technical mentor, assisting schools with ARISS contacts, encouraging interest in ARISS among educators, and visiting schools to teach students about wireless radio technology. One goal of ARISS is to engage students in science, technology, engineering, arts, and mathematics (STEAM) subjects.

The ARISS \*STAR\* Project is a new educational initiative that will enable US junior and senior high school groups to remotely control robots via ham radio through digital APRS (Automatic Packet Reporting System) commands. Year 1 will focus on systems development and initial validation of ARISS \*STAR\*, and year 2 will focus on evaluation and final validation.

Systems development and evaluation will be led by university staff and students who will undertake hands-on wireless and telerobotics lesson development, learn about amateur radio, and support \*STAR\* engineering hardware and software development.

Next, youth teams will be selected to experiment and critique \*STAR\* telerobotics scenarios in closed courses. In the process, ARISS will encourage students to prepare for and earn an FCC amateur radio license, enabling them to use ham radio to learn and practice concepts in radio technology and radio communication.

ARISS-USA Executive Director Frank Bauer, KA3HDO, praised the ARRL Foundation for its generosity. "ARISS team member Keith Pugh, W5IU, poured his energy into inspiring, engaging, and educating youth in space and in amateur radio endeavors," Bauer said. "What better way to honor Keith than through the ARISS \*STAR\* initiative. We thank the ARRL Foundation for its vision to move this initiative forward. Maybe someday one of our ARISS \*STAR\* students will use their telerobotics skills to control scientific rovers on the moon or Mars!"

Over the past 2 decades, more than 1,400 ARISS contacts have connected more than 1 million youth with the ISS using amateur radio, with millions more watching and learning.

The overarching goals for \*STAR\* are to improve and sustain ARISS STEAM educational outcomes. Robotics is gaining popularity among youth and adults alike, and telerobotics adds a wireless accent to robotic control. This will expand ARISS's educational dimension to attract the attention of more groups, students, and educators -- outreach that promises to attract new audiences.

The ARRL Foundation was established in 1973, to advance the art, science, and social benefits of the Amateur Radio Service by awarding financial grants and scholarships to individuals and organizations that support their charitable, educational, and scientific efforts.

ARISS is a cooperative venture of international amateur radio societies and space agencies that support the ISS. US sponsors include ARRL, the Radio Amateur Satellite Corporation (AMSAT), the ISS National Lab's Space Station Explorers, and NASA's Space Communications and Navigation program (SCaN). The primary goal of ARISS is to promote exploration of science, technology, engineering, the arts, and mathematics topics. For more information, visit [www.ariss-usa.org](http://www.ariss-usa.org) and [www.ariss.org](http://www.ariss.org).

## YOUTH ON THE AIR CAMP TO RETURN IN JUNE

After a successful pilot camp program in 2021, the next Youth on the Air for the Americas camp has been set for June 12 - 17, 2022. The camp will return to the National Voice of America Museum of Broadcasting in West Chester Township, Ohio.

The application period will open online February 11. Eligible participants are amateur radio operators between ages 15 and 25. A total of 30 campers will be accepted. Some of the 30 spots will be reserved for campers who reside outside of the US but do reside in the Americas. Priority will be given to first-time attendees. Returning attendees will serve as camp leaders.

"We know that changes in the COVID-19 pandemic status between now and June will have an impact on hosting the camp," said Youth on the Air camp Director Neil Rapp, WB9VPG. "Should we not be able to host the camp or need to reschedule, we will let everyone know with as much notice as possible.

Beginning in 2022, the camp will alternate as much as possible each year between June and July. Rapp says the camp planning working group acknowledges that avoiding all scheduling conflicts

is not possible, but hopes that alternating months will provide some diversity with school schedules, extracurricular activities, and major ham radio events.

Beginning in 2023, the location of the camp will rotate to various locations within the Americas. A system will be announced in which IARU member-societies and clubs will bid to serve as host of the region-wide camp.

For details about the camp and/or to sign up for updates by email, visit the [YouthOnTheAir](#) camp website. [Contact](#) Rapp for more information.

## TWO RADIO AMATEURS APPOINTED TO THE FCC TECHNOLOGICAL ADVISORY COUNCIL (TAC)

FCC Chairwoman Jessica Rosenworcel named two prominent radio amateurs among her appointments to the FCC Technological Advisory Council ([TAC](#)) on January 19. Appointed were Greg Lapin, N9GL, and Michelle Thompson, W5NYV. Lapin chairs the ARRL RF Safety Committee and has represented [ARRL The National Association for Amateur Radio](#) on the TAC since 2001.

ARRL Laboratory Manager Ed Hare, W1RFI, noted that Lapin has been involved with RF safety and the FCC since the last FCC significant rules changes in 1998," he said. "He is again helping the FCC prepare information on [OET Bulletin 65](#), Supplement B for amateur radio, giving guidance for amateurs who need to comply with the FCC rules on RF exposure. His work is highly respected by the FCC and the ARRL Lab, making it easier for amateurs to evaluate their stations."

Thompson is CEO of the Open Research Institute (ORI), which she will represent on the TAC. ORI is a non-profit research and development organization dedicated to open-source work that includes such areas as amateur satellites and digital communications. She is an ARRL Life Member. Thompson will discuss "Digital Communications Technology" on February 10 at the [ARRL National Convention](#) in Orlando, as part of the [Technology Academy](#) workshop Track.

The TAC serves to assist the FCC in identifying important areas of innovation and developing informed technology policies that support US competitiveness in the global economy. The TAC will consider and advise the FCC on topics such as 6G, artificial intelligence, advanced spectrum-sharing technologies, and emerging wireless technologies, including new tools to restore internet access during shutdowns and other disruptions. The TAC will hold its first meeting of the year on February 28.

## THE VOLUNTEER MONITOR PROGRAM REPORT FOR DECEMBER 2021

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the December 2021 activity report of the VM Program.

- Operators in Center Hill and Coconut Creek, Florida, were issued notices for excessive signal bandwidth on 40 and 75 meters, in violation of Section 97.307(a) of FCC rules. General-class operators in Hudson, Florida; Winterville, Georgia; Provo, Utah, and Bloomfield Hills, Jackson, and Howell, Michigan, received notices for out-of-band SSB operation on frequencies not permitted by their General-class licenses, in violation of Section 97.301 of FCC rules.
- Technician-class operators in Baltimore, Maryland; Divernon, Illinois; Moore, Oklahoma; Bradenton, Florida, and Roseville and Rancho Cordova, California, received notices for FT8 operation on unauthorized 20 and 40-meter frequencies, in violation of Section 97.301 of FCC rules.



•Commendations for exemplary amateur radio operation were issued to licensees in these cities: Dahlonega, Georgia (for managing medical and technical issues during the Six Gap Century bicycle race in October); Riverside, California (for operation during the October Earthquake Situational Emergency Test); Swansea, South Carolina (for operation on the SC HF ARES Net); Springfield, Indiana (for assistance to new operators in message handling); Mims, Florida (for exceptional efforts in correcting wideband issues), and Raymond, Mississippi (for exemplary operation during ARRL Field Day, statewide HF and VHF nets, and assistance to new operators).

The totals for VM monitoring in November were 1,901 hours on HF frequencies and 2,784 hours on VHF frequencies and above, for a total of 4,685 hours.

There was one referral from the FCC for enforcement assistance. -- *Thanks to VM Program Administrator Riley Hollingsworth, K4ZDH*

## AMATEUR OPERATION IN THE 3.45 - 3.5 GHZ OF 9 CENTIMETERS MUST CEASE BY APRIL 14, 2022.

Secondary operations will be permitted to continue indefinitely in the remainder of the band, 3.3 - 3.45 GHz, pending future FCC proceedings. On January 14 the FCC [released](#) DA 22-39, which announces the results of Auction 110 for the 3.45 - 3.55 GHz band. Release of this notice triggered FCC rules adopted last year requiring that amateur radio operations between 3.45 GHz and 3.5 GHz cease within 90 days of the public notice. In October 2021, ARRL President Rick Roderick, K5UR, urged Congress to direct the FCC to preserve Amateur Radio's secondary use of the 3 GHz band in a written [statement](#) responding to H.R. 5378, the Spectrum Innovation Act of 2021, before the US House Commerce Communications and Technology Subcommittee. A [chronology of actions](#) responding to amateur access on the 3.5 GHz band can be found on the ARRL website.

## NATIONAL SCIENCE FOUNDATION AWARDS NEARLY \$50,000 FOR HAMSCI WORKSHOP

Nathaniel Frissell, W2NAF, an assistant professor at The University of Scranton Department of Physics and Electrical Engineering, has received a National Science Foundation (NSF) grant of nearly \$50,000 to support the 2022 Ham Radio Science Citizen Investigation ([HamSCI](#)) Workshop. The event is set for March 18 - 19 at The US Space & Rocket Center® in Huntsville, Alabama. The in-person conference also has a virtual format option.

HamSCI is a collective of professional researchers and radio amateurs with the objective of fostering collaboration between the amateur and professional communities to advance scientific research and understanding, encourage development of new technologies to support this research, and provide educational opportunities for both the amateur radio community and the general public.

The workshop will serve as a team meeting for the HamSCI Personal Space Weather Station project, the beneficiary of a \$1.3 million NSF-funded project grant awarded to Frissell. That project seeks to harness the power of a network of radio amateurs to better understand and measure the effects of weather in the upper levels of Earth's atmosphere. The theme for the 2-day HamSCI workshop is "The Weather Connection." The fifth annual workshop will feature prominent leaders in space weather, atmospheric weather, and the connection between them.

"The workshop series has led to cutting-edge work in the fields of space physics, citizen science, and the use of crowd-sourced ionospheric data," Frissell said. "To maximize the potential of the ham radio-professional researcher relationship, meetings are needed to bring these groups together to learn about each other's communities [and] vocabularies, to share ideas, and to participate in activities that advance both the scientific field and the radio hobby."

Frissell's research focuses on the ionosphere, the atmospheric region that extends 50 - 600 miles above Earth's surface. According to Frissell, changes in the ionosphere alter the behavior of radio wave propagation and greatly affect the radio communications and global navigation satellite systems. "Understanding ionospheric structures and processes will lead to an increased understanding and prediction of these effects," he said. Frissell said he's still seeking presentation abstracts for the workshop. Submit abstracts using the form on the [HamSCI Workshop page](#).

## AMATEUR RADIO DIGITAL COMMUNICATIONS GRANTS CONTINUE

ARRL Club Grants Program funded by a grant from Amateur Radio Digital Communications ([ARDC](#)), will make \$500,000 available to radio clubs. The program will provide up to \$25,000 for worthy club projects. Requests for more than that will be referred back to ARDC.

ARRL has long recognized that it is in the best interests of amateur radio to encourage and support amateur radio clubs. Clubs historically have recruited, licensed, and trained new radio amateurs and have provided the community setting for radio amateurs to continue their education and training. The new Club Grants program will help clubs more easily provide and expand their important services.

Beginning in April 2022, amateur radio clubs will be able to apply for these grants by filling out a simple form on the ARRL website. The ARRL Foundation will evaluate the grant proposals. The Foundation was established in 1973 to advance the art, science, and societal benefits of the Amateur Radio Service by awarding financial grants and scholarships to individuals and organizations in support of their charitable, educational, and scientific efforts.

A key criterion for determining awards will be how the project will advance amateur radio in the grantee's community. In most cases, this process should take no longer than 90 days.

ARRL Foundation President David Woolweaver, K5RAV, shared his enthusiasm about this new program. "This program will substantially contribute to the growth of amateur radio clubs and their efforts to expand and support the amateur radio community," he said.

ARDC is a California-based foundation and makes grants to projects and organizations that follow amateur radio's practice and tradition of technical experimentation in both amateur radio and digital communication science. ARDC Executive Director Rosy Schechter, KJ7RYV, noted that this program will streamline the process for getting club projects funded, so that clubs can get started on these projects more quickly.

"We're very excited about working with the ARRL Foundation on this program," said Schechter. "We can't wait to see what kinds of creative things clubs will do with these grants." All of the details of application and criteria are still being developed at this time. Please watch for further details to be released as the program is finalized. -- *Thanks to ARDC*

## SOME RCA HISTORY



Years before the emergence of radio as a medium for music, the mighty Victor Talking Machine Co. expanded its factory with an enormous water tower in Camden, NJ that Philadelphians could see across the Delaware river. To mark the four sides of the tower, D'Ascenzo Studios in Philly was hired to recreate the famous trademark of Nipper listening to "His Master's Voice" in 14-foot stained glass windows.

Nicola D'Ascenzo was born in Italy and came to the U.S. in 1882 when he was 11 years old. At first

a stonecutter and woodworker's apprentice, Nicola took formal painting lessons in the evenings before starting a career as a decorator when he became interested in stained glass. His first glass commission was in 1904 and by the time he died 50 years later his studio has designed more than 7,800 windows – including for Washington's National Cathedral and Folger Shakespeare Library.

The "Nipper Windows" were removed in 1968, when RCA introduced its new "block" logo and replaced them with the modern-looking typeface. This original window is on display at the Smithsonian Museum of American History, today. D'Ascenzo Studios was called on to recreate the windows in 1978, and to repair them after the Victor site was abandoned and then revived in 2003 (today, it's a high-end condo development.) [https://www.livethevictor.com/?fbclid=IwAR1Ld3Eq\\_hxnsUnY9cpdjHKEidEL2xEbimmPFVtdGPreew\\_ufabdjhlM6TI](https://www.livethevictor.com/?fbclid=IwAR1Ld3Eq_hxnsUnY9cpdjHKEidEL2xEbimmPFVtdGPreew_ufabdjhlM6TI) Thanks Dave Arland, RCA/Thomson Alumni on Facebook

## SHORTS

**The 2022 running of the popular International DX Convention (IDXC) in Visalia, California, has been cancelled.** IDXC Co-chairs Bill Kendrick, N6RV, and Mel Hughes, K6SY, posted this announcement on the IDXC website: "It is with regret that the 2022 International DX Convention in Visalia, California, has been cancelled. The convention committee of the Southern California DX Club acted in response to the current [COVID-19] virus threat. We look forward to 2023. Those who had hotel reservations, please contact the hotel to ensure they are cancelled. Note: EVERYONE WHO HAS HOTEL RESERVATIONS, it is your responsibility to cancel your reservation as soon as possible, so that the hotels can resell their rooms."

**A new Technician Question Pool will become effective on July 1.** The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released the [2022 - 2026 Technician Class FCC Element 2 NCVEC Question Pool Syllabus & Question Pool](#) into the public domain. It's available as a Word document or PDF. The three graphics required for the new Technician question pool are available within the documents, or separately as PDF or JPG files. The new pool incorporates some significant changes compared to the 2018 - 2022 pool. Its 257 questions were modified slightly to improve wording or to replace distractors; 51 new questions were generated, and 62 questions were eliminated. This resulted in a reduction of 11 questions, bringing the total number of questions in the pool from 423 to 412. The difficulty level of the questions is now more balanced, and the techniques and practices addressed have been updated. The new 2022 - 2026 question pool is effective July 1, 2022 - June 30, 2026, and *must* be used for Technician-class license exams administered on or after July 1, 2022. -- *Thanks to NCVEC Question Pool Committee*

**[North Coast Contesters](#) are proud to announce that the 28th Annual Dayton Contest Dinner** will be held on Saturday night, May 21, 2022 at the [Hope Hotel](#) - Wright Patterson Air Force Base, Ohio.

**Now Available: Free EZNEC Pro+ v. 7.0** - For details, download links, and possibly questions and answers see: <https://forums.qrz.com/index.php?th...-eznec-pro-4-v-7-0.794085/page-4#post-6088392>

**Reverse Beacon Network (RBN)** is an internet-based network of dedicated wide-band receivers around the world that decode CW signals in real time and generate "spots" that contain frequency, signal strength, and other information. The effect is that of a traditional beacon in reverse -- instead of checking propagation by tuning one's receiver to a transmitting beacon at a particular frequency, one merely transmits (usually by calling CQ on CW) while connected to a RBN to see which of the receivers on the network hears you.

**Pete Smith, N4ZR, announced that the [Reverse Beacon Network \(RBN\)](#) node at TI7W is up and running.** The node fills a gap in the RBN network's coverage, as it is the first in Central America. Pete would like extend his thanks to Kamal Sirageldin, TI5/N3KS, who installed the node at his home in Costa Rica, and to Robert Wilson, N6TV, for technical assistance in getting



the node up and running.

**IC-9700 PTT Breakout Mod** Alex, KR1ST, shared a mod for the Icom IC-9700 that breaks out the PTT for each band individually. He writes "This mod will create three separate PTT outputs, one per band, and is fully implemented in hardware (no CAT or software involved) with just few dollars' worth of parts that you may already have in your junk box." Full instructions, schematics, and parts list are available at [thehamlab.com/2021/12/29/icom-ic-9700-ptt-breakout-mod/](http://thehamlab.com/2021/12/29/icom-ic-9700-ptt-breakout-mod/).

**A Barbados ham is among the world's oldest, if not *the* oldest.** Winston A. "Woody" Richardson, 8P6CC (ex-VP6WR), has turned 107 years old, placing him among the world's oldest radio amateurs. Jim Neiger, N6TJ, told [The Daily DX](#) that Richardson hosted his 1980 - 82 operations (as 8P6J) from his home during the CQ World Wide DX Contest (CW). The Woody Richardson Communications Room at the Amateur Radio Society of Barbados is named for him. Richardson [visited](#) the Amateur Radio of Barbados headquarters in 2020.

**A comprehensive K7RA Solar Update is posted Fridays on the ARRL website.** For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA

**FEMA's Emergency Management Institute (EMI) will offer the [K0428 CERT Train-the-Trainer course](#) online.** This course prepares participants to deliver FEMA's CERT Basic Training course. For additional information, [contact](#) Jamie "Betsy" Mauk, EMI Course Manager. Refer to the [EMI website](#) for course date availability.

**The [State QSO Party](#) website has been updated.** It includes the **2022 rules for the SQP Challenge and Worked All QSO Parties**, the SQP calendar, an updated 2022 WAQP submission form, and the addition of the [Quebec QSO Party](#) to the approved list of QSO parties. -- *Thanks to Stan Zawrotny, K4SBZ*

### **THANKS FOR READING**

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